DOCUMENT RESUME

ED 099 024 JC 740 465

TITLE	A Systematic Approach to Educational Needs Assessment.
INSTITUTION	Florida Univ., Gainesville. Center for Community Needs Assessment.
PUB DATE	26 Sep 73
NOTE	28p.; Paper prepared in support of speech given at Florida State Department of Education Division of Community Colleges Conference on PPBS
EDRS PRICE	MF-$0.75 HC-$1.85 PLUS POSTAGE
DESCRIPTORS	*College Role; *Community Benefits; Community Colleges; Data Collection; Decision Making; *Educational Needs; Educational Planning; Job Market; Management Systems; *Models; Post Secondary Education; *Systems Approach; Technical Reports
IDENTIFIERS	*Florida

ABSTRACT

The focus of this paper is on the development of a model for assessing community educational needs, referred to as the Needs Assessment Project (NAP). The model's primary purpose is to classify, organize, and assign priority to community needs, so that the educational system can assign these needs to the proper administrative unit for changes to be planned and implemented. The NAP is first developing a process or tool to ascertain the educational needs of the people in each community, using one college area to develop and test the model. The data collection for the simulation of the model has begun and will continue as the model is refined with the most relevant factors. The model (or prototype) work will be in two areas: the community as a service area, and the college as a training institution for the total community. Some of the factors that should be studied in analyzing educational needs include future school population projections in each program area, planned traffic patterns and transportation networks, land use changes and land costs, basic demographic characteristics, planned industrial suburb movement, shifting community interests, new skills needed, and changing economic emphasis. Because the initial model will be related directly to assessment of job needs in terms of education, a quantified method will be developed to analyze the economic job market. The following year, the job need portion of the model will be expanded to include college transfer programs, adult basic education, community interests, programs in social cultural areas, and general education. (DB)

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A SYSTEMATIC APPROACH

TO

EDUCATIONAL NEEDS ASSESSMENT

CENTER FOR COMMUNITY NEEDS ASSESSMENT
UNIVERSITY OF FLORIDA
GAINESVILLE, FLORIDA
SEPTEMBER 1973

JC 740 465

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INTRODUCTION

This paper is prepared to support the speech given at the request of Dr. Bill Odom for the Florida State Department of Education Division of Community College's conference on PPBS, September 26, 1973, at 9:00 a.m.. The purpose of the presentation was to explain the activities of the Needs Assessment Project, how it relates to Program Planning and Budgeting, how the Consortium activity developed, and what the results of the model for Needs Assessment will be.

It is the intent of this paper, therefore, to reinforce the speech with written material as requested by the attendees of the Conference. It is a good thing to be associated with such a "break-through" activity in education and creatively work toward the development of a process to help plan a more successful education system, with focus on more successful citizenry through community needs assessment.

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PROBLEM AND RATIONALE:
COMMUNITY NEEDS ASSESSMENT

Needs Assessment is a project aimed at everyone who is denied fulfillment of his potential by providing ammunition to influence planners, administrators, boards, teachers, et al, to examine their attitudes in light of "effective" humanized education service.

Students entering colleges and universities today are increasingly diverse. There are growing numbers of students from ethnic minority backgrounds with special talents, interests, and needs. There are also growing numbers of older students who already have a career of some kind such as housewives who have raised a family or businessmen whose interests have changed. These mature students either are intent on furthering their knowledge and skills or are embarking in a new direction. There is, furthermore, an increasing desire by all students to put a stamp of their uniqueness on their college program. They want to design their own major, to substitute work or living experiences for classroom study, or have the classroom activity relate more closely to their individual abilities and understandings.

In various ways many students do not fit into the standard educational programs offered. Someone from an ethnic minority background may find it difficult to relate his interests and skills to the standard courses; he may have special needs not met by conventional arrangement. The older students may be already knowledgeable in some areas beyond the level of training that colleges can provide and therefore wish to pick from among the curricular with more flexibility. In fact, they may be at a level of proficiency that would qualify them to teach some courses.

These changes in students imply that a change in focus is needed in planning programs of general requirements and major specialization. Where the focus customarily has been on the curriculum, a new focus is indicated toward the student. Where the body of general knowledge or knowledge in an area of specialization has been the guiding consideration in planning programs, the individual student's intellectual development must be given more weight.

As Arthur Bestor wrote:

> "We must remember, at all times, that education is concerned with improvement. It undertakes to change a man or a woman from what he is to what he or she might be and ought to be." [4]

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If indeed, it can be said that education exists to change the human being into one capable of reaching a higher potential than what he is obtaining at a given point in time, then it stands to reason that the same logic must apply to the system itself. That is, the education system must be continually concerned with changing itself from what it is to what it should be to insure the best transfer of knowledge according to the changing needs of the individuals served. As Jerome Bruner, the major publicist for conceptual learning, wrote in 1960:

> "What may be emerging as a mark of our own generation is a widespread renewal of concern for the quality and intellectual aims of education - - but without abandonment of the ideal that education should serve as a means of training well-balanced citizens for a democracy. . . . Education should be instrumental to further achievement." [5]

To guarantee a positive impact on the future achievement of all persons who pass the halls of education will require that the diversity of the populace served be included in the planning of curriculum. The point is that students often cannot make use of a regular, pre-planned program - - especially today when so many of the students are evidencing different needs. The emphasis must be shifted from rigid curriculum and degree-granting institutions to providing service to learners. This shift in emphasis immediately removes the elitist attitude from the colleges and universities and opens the doors for new sorts of student populations of all ages. By the same token, it also requires a consistent, dependable, method for keeping up with the changing patterns and needs of the potential students so that workable plans can be implemented.

That is the purpose of community needs assessment in education - - to assess the status of the populace served by the given educational institution so that the curriculum can be changed from what it presently is to what it should be to provide better service to all citizens for whom it is responsible.

The focus of this paper, therefore, will be on the development of a model for assessing community educational needs, referred to as the Needs Assessment Project (NAP).

Figure 1 shows the interaction required between the community and college to insure ability of decision makers to plan for community educational needs. Figure 2 shows the relationship in more detail as to how the socio-economic community influences the educational system.

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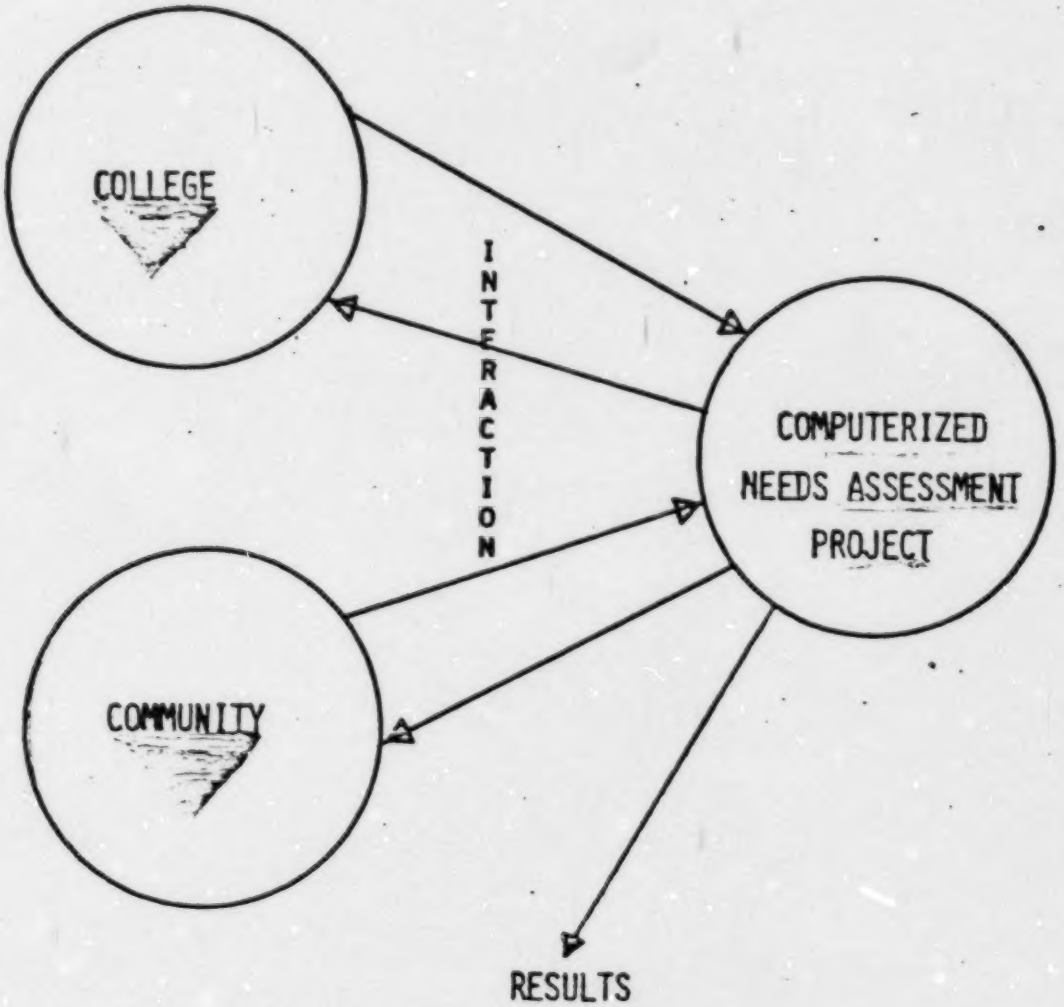
NEEDS ASSESSMENT PROJECT PLANNING MODEL



ORGANIZED CHANGE THROUGH BETTER PLANNING DATA FOR EFFECTIVE ADMINISTRATION

FIGURE 1

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SOCIO-ECONOMIC SYSTEM AS IT INFLUENCES THE EDUCATION SYSTEM

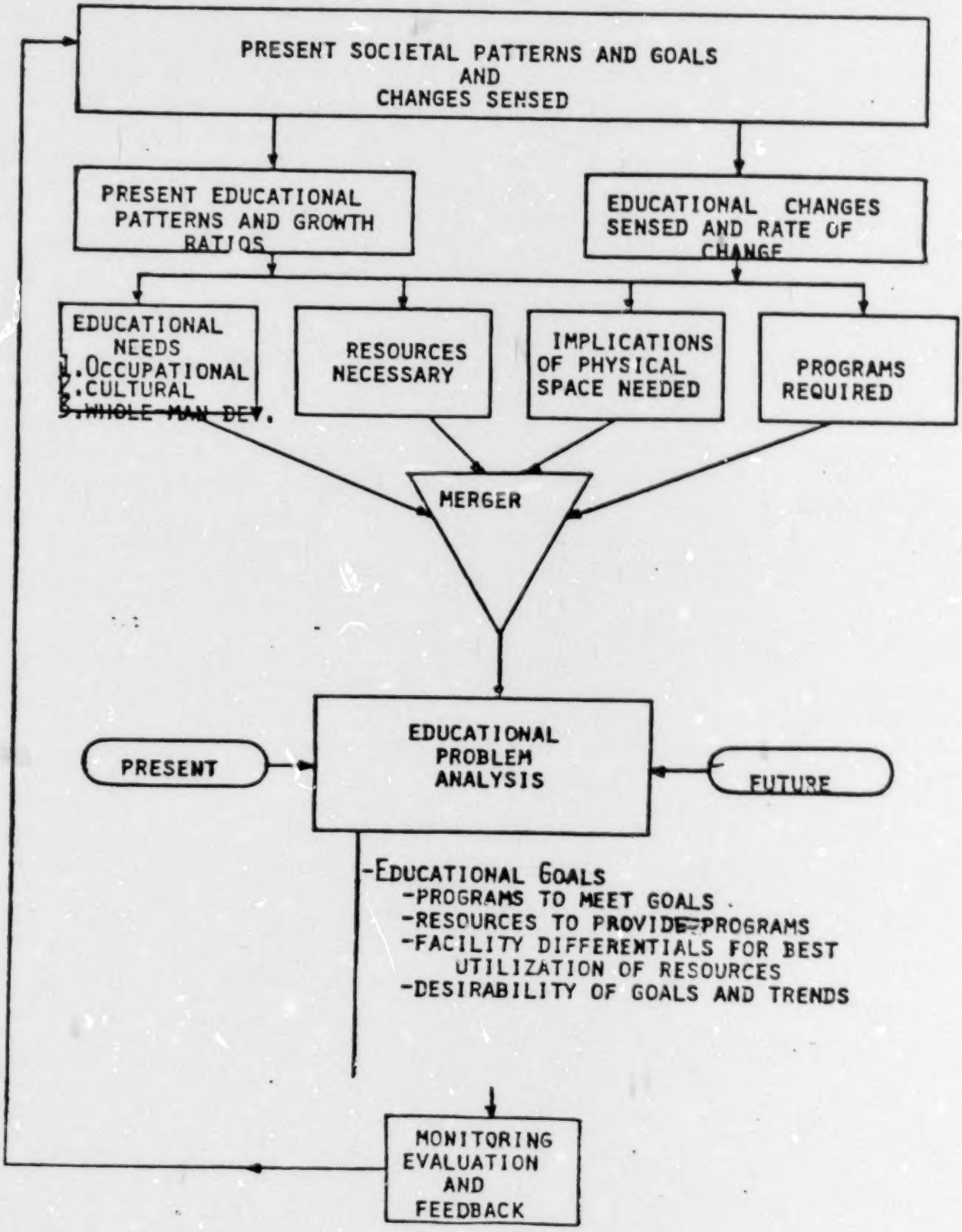

FIGURE 2

HOW THE NEEDS ASSESSMENT PROJECT DEVELOPED

It is becoming more and more evident that student enrollment in all community colleges will not continue to increase. In fact, many in recent years have felt a significant drop in enrollment thereby affecting the amount of money received, as well as the allocation of resources. This brings an urgency to the administration of the college to plan an effective curriculum helpful to the community's progress. It also requires a knowledge of the type of community educational needs so that students can be trained to fill the gaps in the economic future.

Because of the possibility of loss in student enrollment and the need to serve diverse groups of students, a group of community colleges formed a consortia in Florida to jointly build a process for determining community educational needs. The Consortium is composed of seven colleges serving 17 counties as shown in Figure 3.

Funds for the systematic development of the needs assessment model were obtained from HEW, Title III office, for developing institutions. The project has been in existence for one year and it is anticipated that it will take three years for its entire completion, documentation, training, and implementation.

Needs Assessment recently has become a major focus at all levels of education. This is because of the increasing interest at all levels of government in accountability and program planning based on needs of the citizenry.

At the national level, President Nixon ...

> in an address to Congress on March 3, 1970, stated, "the greatest need in the school systems of the nation is to begin the responsible open measurement of how well the educational process is working."

In Florida, the Department of Education has clearly stated its commitment to a program of statewide needs assessment. The Department stated that:

> "The effort to secure clear goals and objectives is supported at the state level by needs assessment activities designed to identify broadly those goals which education should pursue and to college information for assigning priorities. Such needs assessments encompass gene education, occupational education, and advanced professional education".

Therefore, it is the opinion of the writer that the nation has finally begun to emphasize the first essential step in the educational planning function; i.e., the priority of needs prior to the establishment of educational programs.

Figure 4 shows how the data collected and analyzed can be compared to study in more detail the discrepancies between the needs as evidenced in the community and the needs being met by the college.

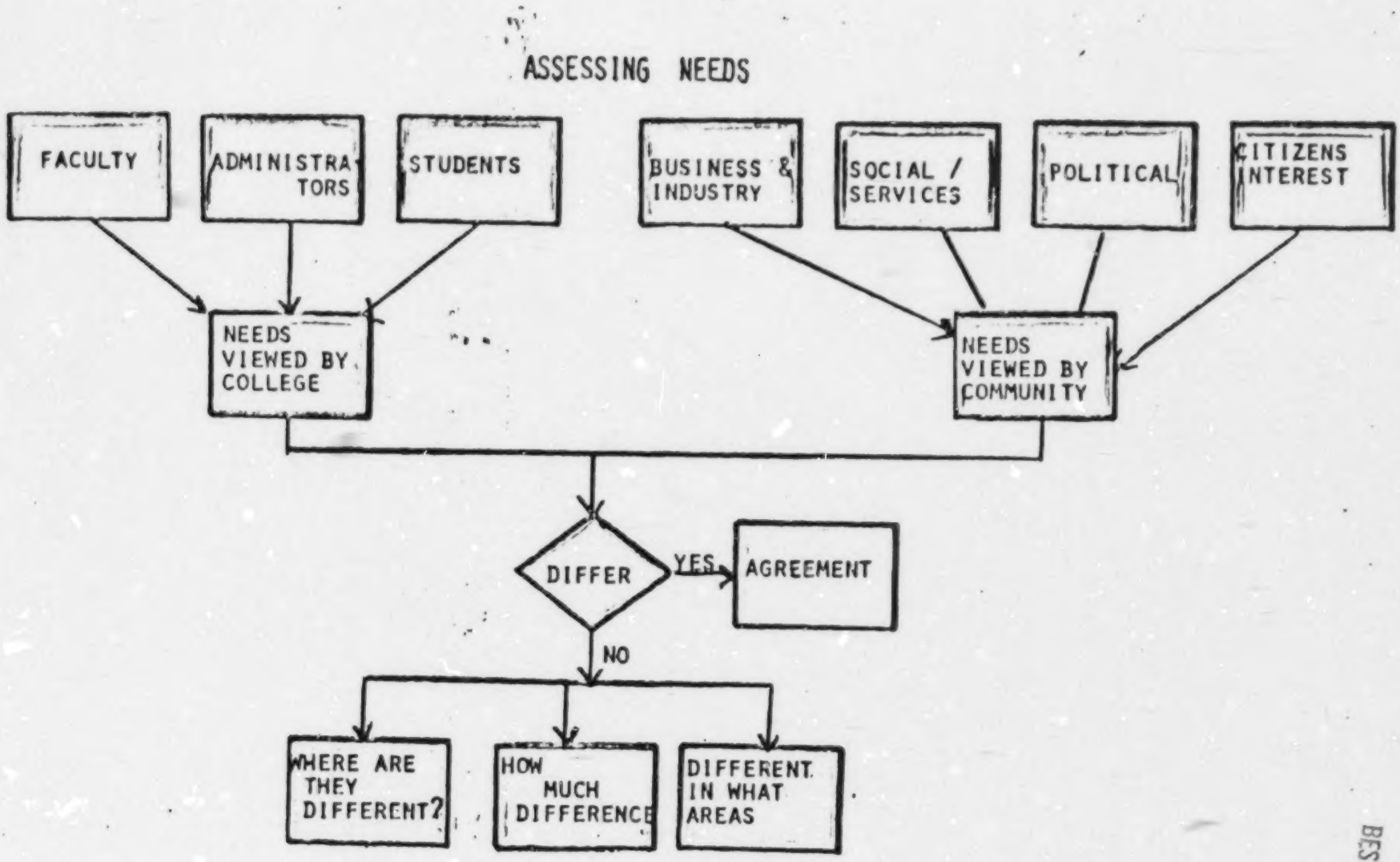

FIGURE 4

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Project Objectives

The major goal of the project is to develop a valid, realistic model to research the educational needs of the community on a continuous, dynamic basis to provide the institution quantified data on which to base its decisions. Through the use of this approach to educational planning one should be able to say that a group with a certain set of demographic characteristics need certain types of education, would be receptive to learning certain skills, or that certain kinds of educational approaches would be conducive to their learning. By including needs assessment in instructional planning, decision makers will have a method for ranking educational needs, for determining budget allocation guidelines according to need priorities, and ultimately for developing a full cost-benefit approach to needs fulfillment. This will allow administrators to be more responsive to needs, change activities as needed, justify requested funds, and provide accountability to the public.

The major task in needs assessment lies with the building of the prototype model - - the analytical framework that realistically represents the larger system while retaining the capacity for replicability in other systems.

To develop a simulation model that is realistic and to evaluate the effectiveness of the computerized model in sensing educational needs, a college must be selected for analysis and implementation that is representative of the consortium. Florida Junior College at Jacksonville and the Jacksonville area are providing the college and community base in which the model will operate. See Figure 4 for urban view, Figure 5 for tracted areas, and Figure 6 for a computerized map view by tract showing density of population.

Florida Junior College at Jacksonville and Jacksonville were chosen because of their size, complexity, and responsiveness to Needs Assessment. The needs in Jacksonville are dynamically changing as a result of the industrial expansion and population boom. [14] Jacksonville, the "Gateway to Florida," is one of the foremost transportation and distribution centers in the Southeast. Population growth has been a persistent element in the total area for the past 100 years. The problems brought on by the population explosion (528,865 in 1970) [23] have fallen into many areas in addition to education such as taxation, bond in-debtedness, public works, inadequacies, recreation and health needs, public safety, and crime delinquency. Because of the widespread effect on all citizens of this area, much concern is being generated about keeping pace with the changing

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community needs. If the population continues to rise (and it is expected to double by 1990), then the changing population distribution, shifting the emphasis in educational needs, must be continuously studied and improved. [12, pg. V] The most severe problems are concentrated in the inner city, but suburbia is contributing significantly to the changing needs also.

Florida Junior College at Jacksonville, as a comprehensive community educational system, can effectively serve as the prototype for the overall model development. It is a multi-campus institution with over 100 community centers located throughout the city to serve the broad area covered by consolidated Jacksonville, the largest incorporated city in the nation. Florida Junior College at Jacksonville opened its doors in September, 1966 with 2,579 students. [19] In 1971-72, 41,543 students were enrolled. [10] It is expected that the enrollment will reach 65,000 by 1980. Thus, it becomes extremely important that the allocation of resources and planned curriculum reflect the educational needs of the extremely diverse groups that constitute the potential student body.

The model's primary purpose is to classify, organize, and prioritize community needs so that the educational system can assign these needs to the proper administrative unit for changes to be planned and implemented.

Detailed Objectives

1. Develop a data collection model to determine needs of the total population.
2. Establish a hierarachy of community education needs.
3. Relate the assessed needs according to the geographical distribution of the community population characteristics.
4. Enable education to compare its present status with the assessed needs identified by the study.
5. From assessed needs, state measurable, meaningful goals and objectives that can be interpreted into short and long range plans.
6. Develop and apply cost/utility analysis to acceptable alternatives designed to meet objectives.
7. Implement selected solution from alternatives to meet each objective.
8. Monitor the results of implemented solutions to evaluate effectiveness through follow-up analysis (validity of data).
9. Give direction for "new money requirements" when priorities are beyond budget constraints.
10. Improve community relations through greater understanding and involvement with the educational system.
11. Improve lines of communications between the community and the total educational system, leading continuous educational exchange.
12. Increase awareness of administrators as to how their educational institution can meet community needs through an improved management process.

HOW THE NAP MODEL IS BEING DEVELOPED

The Needs Assessment Project is being performed by first developing a process or tool to ascertain the educational needs of the people in each community, using one college area to develop and test the model. (As has been discussed in the previous pages, Duval County is serving as the community base.)

The portion of the model being developed in the coming year is toward the target group for job related educational needs. The data collection for the simulation of the model began last year and will continue as the model is refined with the most relevant factors. Figure 8 shows the data collection model in general terms with the merger of each consortium college's specialized activity for the coming year. Its aim is to relate how the data collected fits together for analysis, decision-making, and planning future needs.

The model (or prototype) work will be in two areas: the community as a service area and the college as a training institution for the total community. In the community, occupation information will be gathered and aggregated by Dictionary of Occupational Title codes. Then the list will be prioritized and broken down by worker traits. These will be matched to education so that a translated list of prioritized programs will be produced. Projections can be made based upon information from the Department of Labor, Census Bureau, Department of Commerce, and Florida State Employment Service. These projections will be tempered by the projective algorithm to insure their applicability and appropriateness. They will then be compared to the college data to project future shifts of program emphasis.

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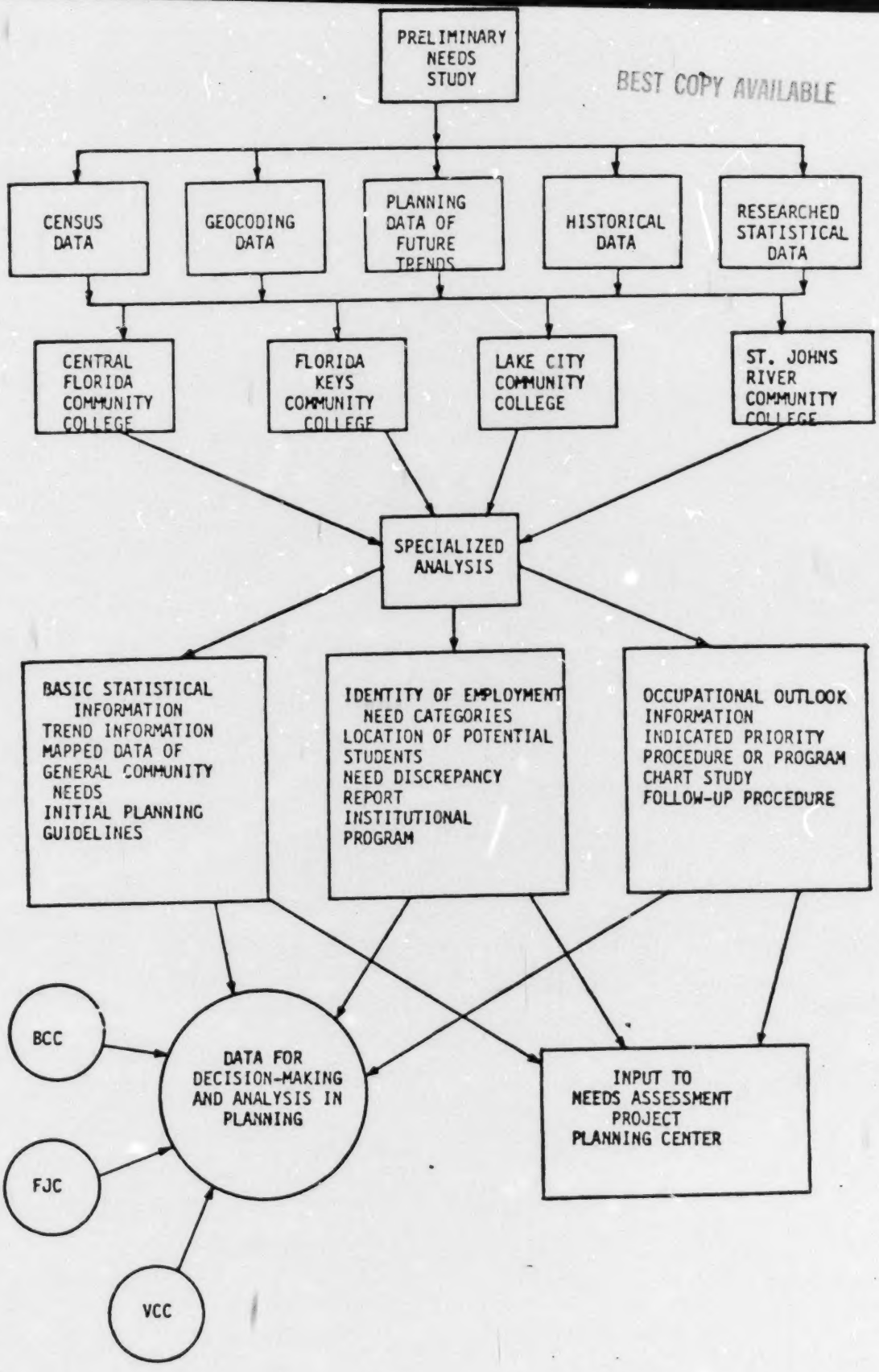

NAP
DATA COLLECTION
AS IT RELATED TO DECISION MAKING

 Figure 8

Basic Statistical Information:

The factors used for the analysis of educational needs must be dynamic so that changes can be made constantly to reflect the changing community requirements occurring through time. Some of the factors that should be studied include future school population projections in each program area, planned traffic patterns and transportation networks, land use changes and land costs, basic demographic characteristics, planned industrial suburb movement, shifting community interests, new skills needed, and changing economical emphasis.

The Needs Assessment Project model development has begun with the analysis of certain of these factors which are basic to the preliminary educational assessment of the community.

We have been able to find data that are collected on a continuous basis--common to all 17 counties served by the community colleges in the Consortium. We have also screened the data down to 4 major sources: U.S. Census population statistics, Department of Labor Statistics on cities, Florida State Employment Service job opening data and Chamber of Commerce business, industry, and service organization data. From these 4 sources, we are now working to match population, labor needs and occupational patterns in such a way that a priority ranking can begin. The following page shows what sources are being merged in this year's model activities.

This means that we can eventually refine population characteristics to rank areas according to educational needs, weight one job need to another, and compare the educational pattern of one occupation to another. It also means that we must keep in mind that the community college has constraints placed upon it since it is not the sole educational institution responsible for training. Therefore, we now must define those constraints so that we limit the abundance of data to the portion each college can find meaningful and translate into curriculum planning.

COLLEGE INVOLVEMENT 73-74

TO DEVELOP A DOCUMENTED PROCESS TO:

ASSESS EDUCATIONAL GOALS OF COMMUNITY COLLEGES	BREVARD COMMUNITY COLLEGE
PRIORITIZE PRESENT PROGRAM PRIORITIES	FLORIDA KEYS COMMUNITY COLLEGE
STUDY CHARACTERISTICS OF STUDENTS	CENTRAL FLORIDA COMMUNITY COLLEGE
DETERMINE COMMUNITY AWARENESS OF COLLEGE	FLORIDA JUNIOR COLLEGE AT JAX.
SURVEY PERSPECTIVE EMPLOYMENT NEEDS	ST. JOHNS RIVER JUNIOR COLLEGE
ANALYZE MANAGEMENT ENVIRONMENT FOR DECISION MAKING	VALENCIA COMMUNITY COLLEGE
ANALYZE EFFECTIVENESS OF EDUCATION ON FORMER STUDENTS	LAKE CITY COMMUNITY COLLEGE

↓

WHICH WILL

↓

ADD TO THE OVERALL PROCESS DEVELOPED IN THE NEEDS ASSESSMENT MODEL

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Figure 10

College Involvement:

Along with the model development each college will have special activities which will complement the overall model. These activities or modules will be in the form of surveys in the college and community. The result will be a documented process that will fit into the model process. This of course means that each college will have a specific product in addition to the process. Figure ten (10) shows the specialized activities to be accomplished by each college.

Logic to be Followed In The Process:

Because the initial model will be directly related to this assessment of job needs in terms of education, the sources indicated in Figure 9 will be used to develop a quanitified method to analyze the economic job market. The value of knowing this information is in knowing where the college stands in reference to those needs. Therefore, college programs will be analyzed to determine the distribution of students by program, characteristics of students in one program compared to another, cost distribution per program, and jobs trained for by programs. This information can be used to pinpoint current discrepancies and then to locate potential students. Projections per potential will be constrained by the community based projections and alternative ways to meet these needs will be produced. Figure 11 shows Activities that must be accomplished to develop the NAP.

Expansion, Training, and Implementation:

The year following the job need portion of the model will be spent in expanding the model to include college transfer programs, adult basic education, community interests, programs in social cultural areas, and general education.

ACTIVITIES THAT MUST BE ACCOMPLISHED
TO DEVELOP THE NEEDS ASSESSMENT PROCESS

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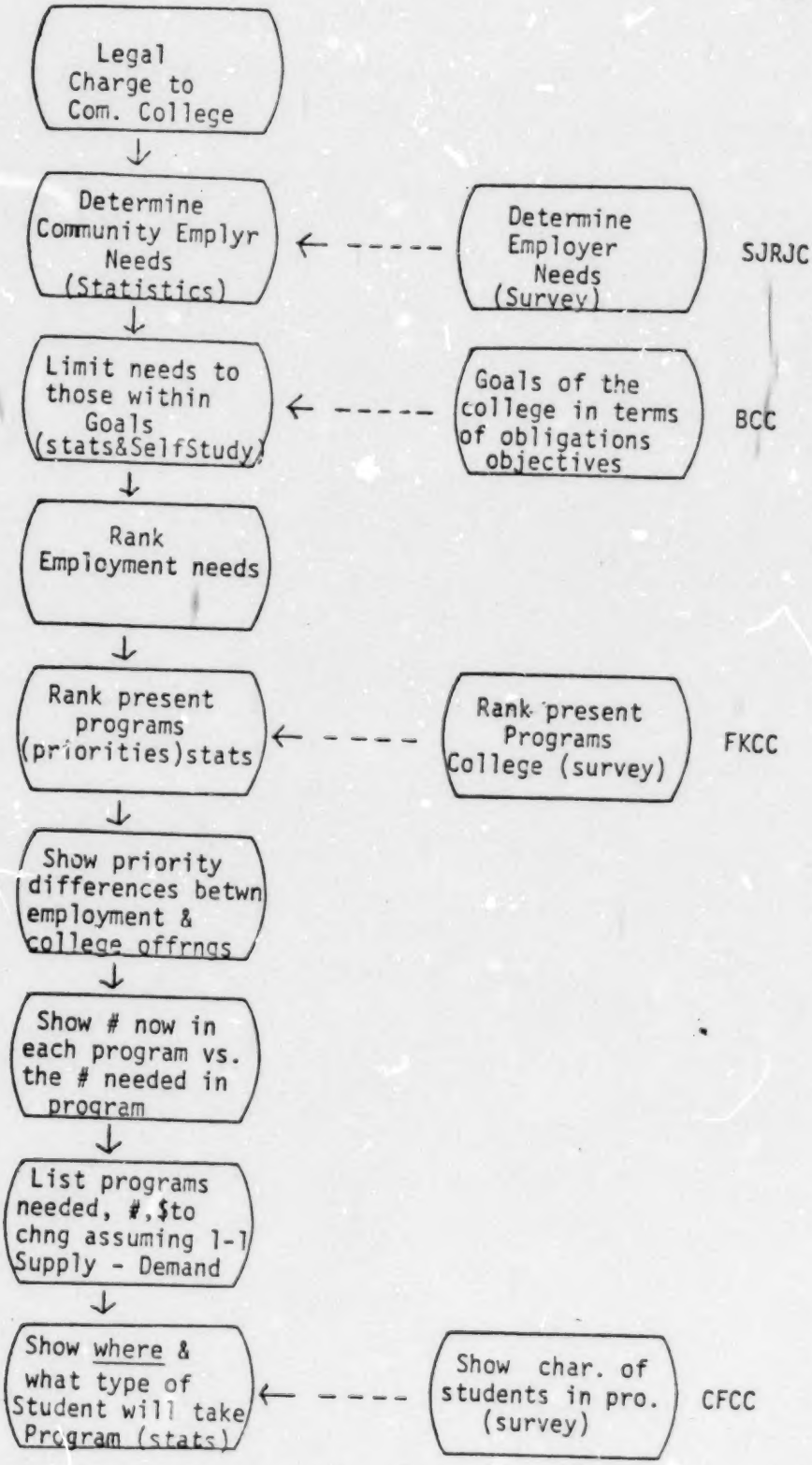
Legal Charge to Com. College
Determine Community Emplyr Needs (Statistics)
Determine Employer Needs (Survey)
SJRJC
Limit needs to those within Goals (stats&SelfStudy)
Goals of the college in terms of obligations objectives
BCC
Rank Employment needs
Rank present programs (priorities)stats
Rank present Programs College (survey)
FKCC
Show priority differences betwn employment & college offrngs
Show # now in each program vs. the # needed in program
List programs needed, #,$to chng assuming 1-1 Supply - Demand
Show where & what type of Student will take Program (stats)
Show char. of students in pro. (survey)
CFCC

Figure 11

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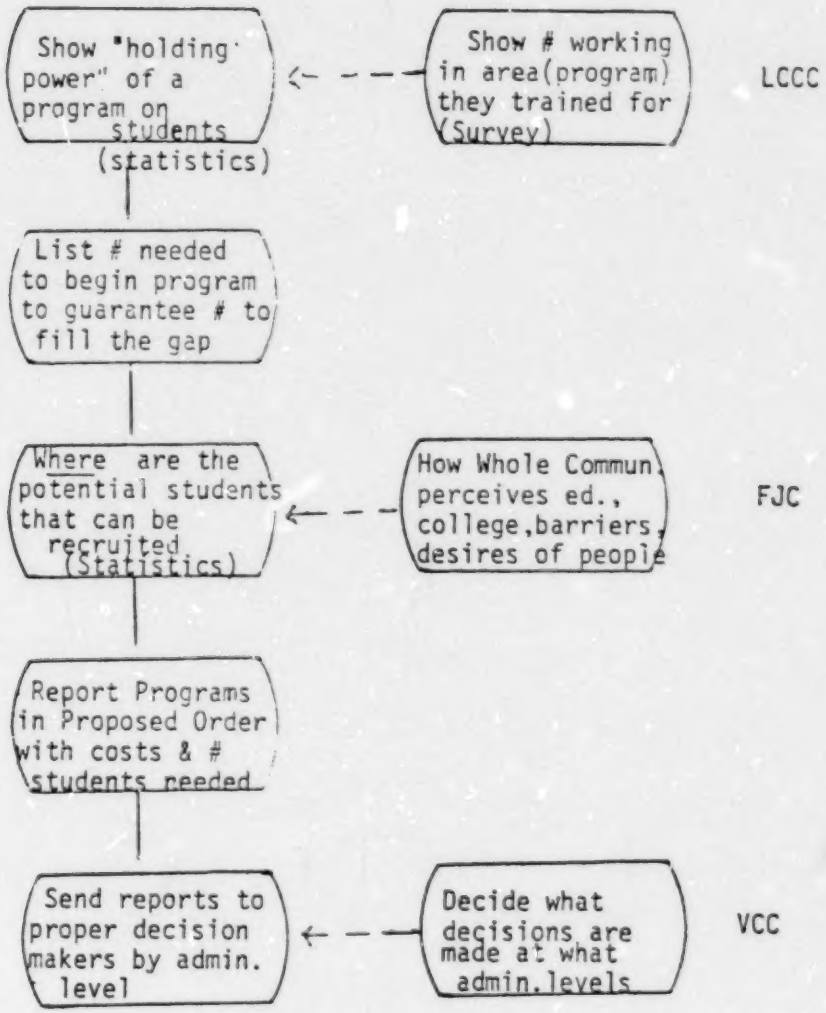
Show "holding" power" of a program on students (statistics)
Show # working in area(program) they trained for (Survey)
LCCC
List # needed to begin program to guarantee # to fill the gap
Where are the potential students that can be recruited (Statistics)
How Whole Commun. perceives ed., college, barriers, desires of people
FJC
Report Programs in Proposed Order with costs & # students needed
Send reports to proper decision makers by admin. level
Decide what decisions are made at what admin. levels
VCC

This same process -- used at present to identify job needs -- will be used to identify:

1. Continuing Education Needs in University Transfer Curriculum
2. General Education Needs in Core Curriculum requirements
3. Adult Basic Education needs for the unskilled, uneducated populace
4. Community Interest and Services that college can provide
5. Social/cultural needs in curriculum offerings to the community.

Figure 11

As the model is expanded each college can begin to implement the job need portion of the model at their individual college. To guarantee that this project is assimilated into educational planning, the college administration will be trained to understand and work with the needs assessment process. This process can then become an integral part of the administrative framework of the college. It will play a dual role, functioning both as a disseminator of information and as an information gathering network. The most important aspect of the project lies in evaluating the effectiveness of the model in assessing community education needs and refining the process as corrective action is needed.

Examples of Reports From NAP:

Figures 12 and 13 provide examples of reports that can be prepared when the Needs Assessment Model is implemented. Figure 14 shows how Needs Assessment fits into college planning as a forerunner to PPBS (Program Planning Budgeting System).

COMMUNITY REPORT

ON

NEEDS

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"Program" Needs in Priority	Distribution of Bussinesses/ Ind. Using each Program	Population Areas where college can draw Potential Students	Average Salary or Range	Experience Range Commonly Required (if any)	Education Requirements from Community Employer Perspective Per Program

Figure 12

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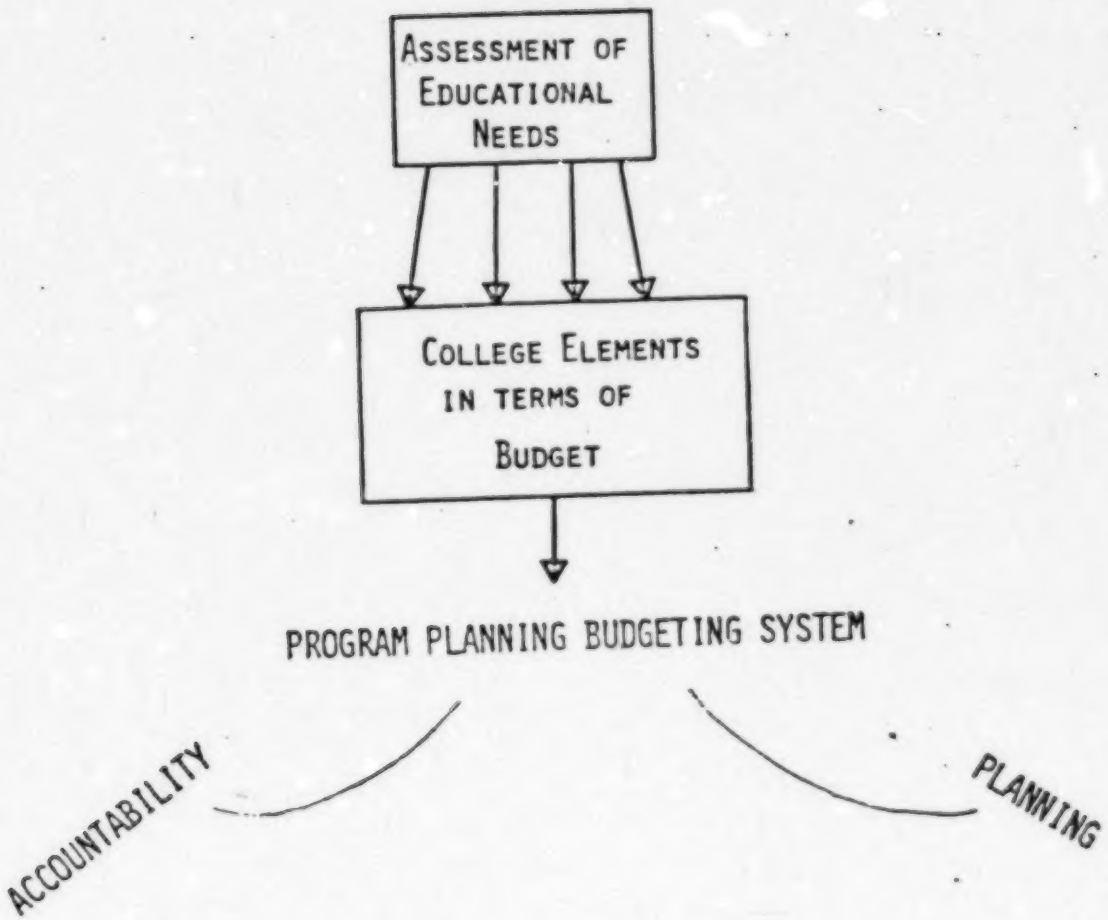

Figu

NAP and PPBS

CONCLUSION

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A comprehensive evaluation program with an accurate needs assessment process behind it can be an effective instrument of change within the college and within the community. In the college, it should provide a more flexible and realistic program for the student, allowing him more opportunity to take what he needs for social and cultural growth and more channels of training according to his own potential in job skills. The student will become more responsible for his own development deciding more for himself, and earlier, what course of study he wants to follow. This puts greater responsibility on the student advisory personnel of the college, and requires a better job placement relationship with the community.

Within the community, the needs assessment model results in greater job and class mobility, higher individual self-concept, better knowledge to the individual for competing in his society, more help to the problem youth, and economic impact predictions for local environmental planning. As education becomes more responsive, it builds positive communication links between the community and educational system such that referendum presented to the public and legislation can gain greater acceptance. It also keeps education responsible to the clients for which it exists. The major contribution to the community, however, is in its forcefulness on ending isolation through more experience and exposure so more realistic goals for career choices can be made – beyond whatever is available at the time they enter the job market.

> "Had God anticipated the eventual structure of the public school system He surely would have shaped man differently. Perhaps with a square little head to match his square little books and his square little classrooms. Surely He would have made man uniform in height to make lining up easier, in thought to make testing easier, and in sensitivity to make teaching him easier. Whether the Creator thought this work too dull, or too unimportant, He nevertheless ducked it and we kindly picked it up and have been occupying ourselves with it for a number of years." [13, p. 11]

The Educational System often becomes so bogged down in the maze of procedures, standards, divisions, and tradition that it forgets that its purpose and existence in the first place is for services necessary to help citizens realize their full potential. That is,

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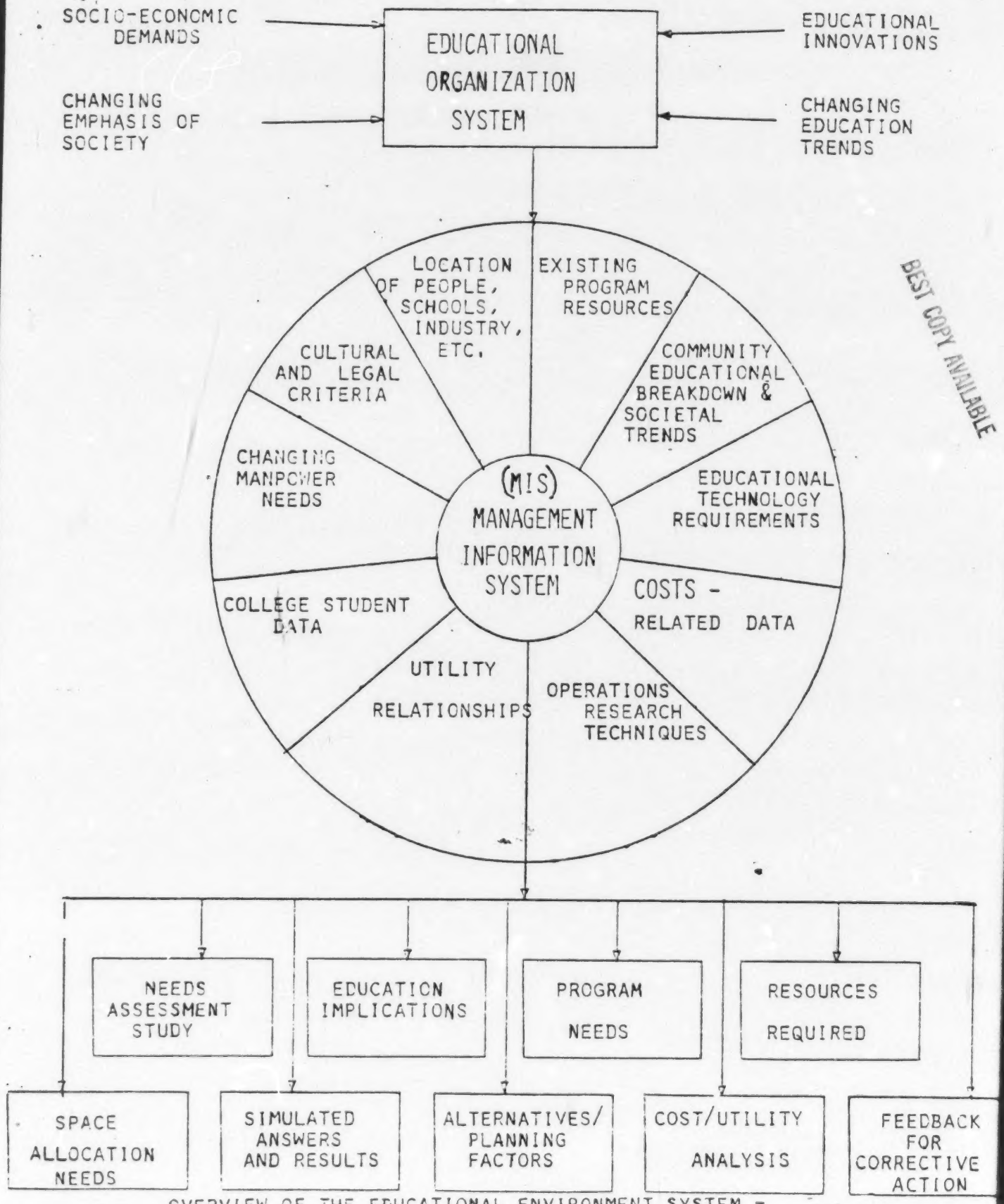
education and any activities within the educational system, should exist only for the purpose of complementing instructional service. However, to do this, needs must first be assessed so that the priorities within instruction can be determined. It follows that discrepancies can be identified, resources be allocated more in line with needs, and valid decisions can be made through reliable quantification to evaluate the effectiveness and need of all management areas.

Needs Assessment can be a tool to help education be more responsive to the needs of the citizenry – showing up discrepancies based on facts rather than guesswork. It is a tool so much better than anything we have now and can be revolutionary in bringing about positive change for the most important human process of all – the education of man. It can be the vehicle by which the formal system moves from its existing state to what it should be.

The major intent of the Needs Assessment Project is to develop a valid, realistic model by which the education system can research the educational needs of the community in a continuous basis and have quantified data on which to base its decisions. In doing this the project will develop procedures for ranking educational needs, for determining budget allocation guidelines according to need priorities, and ultimately develop a full cost-benefit approach to needs fulfillment. This will allow administration to change activities as they are needed, have justification when funds are requested, and provide accountability to the public for tax monies spent for the education of society.

It is further intended to computerize the model providing the capability for large data bases, fast and accurate analysis and also allowing administrations to ask "what if" questions. It is a major goal of the project that this model be fully exportable to any education system in the nation for effective educational planning.

Figure 15 shows how Needs Assessment fits into the total Management Information System for the educational planning function.



OVERVIEW OF THE EDUCATIONAL ENVIRONMENT SYSTEM -

FIGURE 15

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SELECTED BIBLIOGRAPHY

1. American Association of Community and Junior Colleges. 1972 Assembly Report. Presented to meeting November 30 - December 2, 1972 at Arlie House, Warrenton, Va. (Draft, 12 / 2 / 72)

2. Baker, George A. A Systems Approach to Orgainzation Development: Identifying and Achieving Consensus on the Goals of a Community College Dedicated to Student Learning, unpublished doctoral dissertation, Durham, N. C.: Duke University, 1971

3. Baker, George A. and Brownell, Richard L. Participative Goal Setting: A Synthesis of Individual and Institutional Purpose. Durham, N. C.: National Laboratory for Higher Education. Prepared for the 1972 Annual Forum, Duke University, December 13, 1971.

4. Compact, 6: Pg 24, February, 1972.

5. Educational Goals and Objectives -- A Model Program for Community and Professional Involvement. Chico, California: Northern California Program Development Center, N. D.

6. Educational Renewal: The Florida Strategy. Tallahassee, Florida: Department of Education, May 8, 1972.

7. Foley, Bill "FJC Expects Enrollment to Pass 65,000 by 1980", Florida Times - Union, October 18, 1972

8. Foley, Walter, Principal Investigator. Utilization of Modern Management Techniques in School Administration. Iowa City: University of Iowa, 1972.

9. Institutional Self-Study Report, 1971 - 1973. Jacksonville Florida: Florida Junior College At Jacksonville, June 11, 1971.

10. Instruction Booklet for DUALabs' 70 - Series (MOD-X) Programs. Arlington, Virginia: Data Use and Access Laboratories, July, 1970.

11. Jacksonville Community Renewal Program. Technical Reports 1-4. Prepared by Jacksonville Community Renewal Program and Gladstone Associates Economic Consultants, July 31, 1972 and September 22, 1972.

12. Laboratory for Computer Graphics and Spatial Analysis. SYMAP Manual Version 5.15. Cambridge: Harvard University, 1971.

13. Leopold, W. D. Analytic Anthropokenitic. Phenomenology: A New Approach to Education. Amherst: The Newell Press, 1971.

BEST COPY AVAILABLE

14. National Assessment of Educational Progress. Ann Arbor, Michigan: Committee on Assessing the Progress of Education, 1969.

15. Norris, Eleanor L. "National Assessment: An Information Gathering and Information Dissemination Project", Education, 91: pg. 286-291, April-May, 1971.

16. Office of Informational Services, I S Newsletter, 3: pg 1, October 2, 1972.

17. Parker, Louis L. "Interactive Networks for Innovational Champions: A mechanism for Decentralized Educational Change," unpublished doctoral dissertation. Iowa City, Iowa: The University of Iowa, 1972.

18. A Survey of Educational Needs, Columbus, Ohio: Center for Improved Education, Battelle Memorial Institute, 1972.

19. Tucker, Katie D. "A Simulation Approach in Determining School Site Location," unpublished doctoral dissertation. Tallahassee, Florida: Florida State University, 1972.

20. U. S. Bureau of the Census. Housing Statistics: Florida, Report H C (1) - A. (Washington, D. C., February, 1972)

21. "Vocational Education," D & R Report, periodical of the Council for Educational Development and Research Inc. 1: pg 1, Summer, 1971.

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